#### INTERDEPARTMENT CORRESPONDENCE

FILE

P. I. No. 0006942, Sumter County

**OFFICE** Preconstruction

CSSTP-M006-00(942)

Muckalee Creek Wetland Mitigation Site

**DATE** May 24, 2005

FROM

Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

TO

SEE DISTRIBUTION

### SUBJECT PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

MBP/cj

Attachment

#### DISTRIBUTION:

**David Mulling** 

Harvey Keepler

Ken Thompson

Jamie Simpson

Michael Henry

Keith Golden

Joe Palladi (file copy)

Paul Liles

Babs Abubakari

Thomas Howell

**BOARD MEMBER** 

INTERDEPARTMENTAL CORRESPONDENCE

FILE:

SUMTER CSSTP-M006-00(942) Cherokee

**OFFICE:** Engineering Services

P.I. No. 0006942

Mitigation Site Construction

**DATE:** May 18, 2005

FROM:

Brian Summers, Project Review Engineer NEW

TO:

Meg Pirkle, Assistant Director of Preconstruction

CONCEPT REPORT SUBJECT:

> We have reviewed the Concept Report submitted April 28, 2005 by the letter from Harvey Keepler dated April 22, 2005, and have no comments:

The costs for this project are:

Construction \$2,314,000 Inflation N/A E&C N/A Reimbursable Utilities N/A Right of Way N/A

REW

c: Harvey Keepler, Attn.: Steve Wiedl

# **SCORING RESULTS AS PER MOG 2440-2**

Project Number:			County:		and modern and a transfer of the	PI No.:	
CSSTP-M006-00(942)			Sumter			0006942	
Report Date:			Concept By:				
April 22, 2005			DOT Office: OEL				
M Composet Otomo			0	4. Dishabit	-4- 1		
Concept Stage			Consultan	Consultant: Biohabitats, Inc.			
Project Type: Choose One From Each Column		☐ Major ⊠ Minor	☐ Urban ⊠ Rural	Build	ge Replacement		
					☐ New	Location ening & Reconstruction cellaneous	
FOCUS AREAS	SCORE			RES	SULTS		
Presentation	100						
Judgement	100						
Environmental	100						
Right of Way	100						
Utility	100						
Constructability	100						
Schedule	100						

#### INTERDEPARTMENT CORRESPONDENCE

FILE

P.I. No. 0006942, Sumter County

**OFFICE** Preconstruction

CSSTP-M006-00(942)

Muckalee Creek Wetland Mitigation Site

DATE M

May 12, 2005

FROM

Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

TO

David E. Studstill, Jr., P.E., Chief Engineer

#### SUBJECT PROJECT CONCEPT REPORT

This project is the Muckalee Creek Wetland Mitigation Site, located in forested terrain along Muckalee Creek approximately 2.0 miles south of Americus and 1.0 mile east of U.S. 19. The site is a 400 acre tract already owned by the GDOT. The environmental restoration actions planned for this site include reestablishment of natural wetland hydrology by backfilling an extensive system of ditches excavated by the previous landowner; reestablishing wetland vegetation by harvesting planted pines and replanting with native bottom land hardwood tree species; and performing stream restoration by removing and extensive stream side berm which has been placed along the bank of Muckalee Creek. Wetland restoration proposed under this project will provide compensatory wetland and stream mitigation necessary to obtain Corp of Engineers 404 permits for various GDOT roadway and bridge projects.

Environmental concerns include requiring a Section 404 permit (Nationwide 27 for Mitigation Sites); mussel survey/possible Section 7 coordination for federally protected mussels; avoidance of archaeological site will be necessary.

The estimated costs for this project are:

PROPOSED APPROVED FUNDING PROG DATE

Construction (includes E&C

and inflation)

\$2,314,000 \$2,314,000

Lump

Lump

Right-of-Way & Utilities

-0-

-0-

I recommend this project concept be approved.

MBP:JDQ/cj

Attachment

CONCUR

Buddy Gratton, P.E., Director of Preconstruction

**APPROVE** 

David E. Studstill, Jr., P.E., Chief Engineer

#### INTERDEPARTMENT CORRESPONDENCE

APR 2 6 2005

FILE CSSTP-M0006-00(942), Sumter Co. OFFICE Environment/Location P.I. No. 0006942

DATE

April 22, 2005

FROM Harvey D. Keepler, State Environmental/Location Engineer

TO Meg Pirkle, Assistant Pre-Construction Division Director

SUBJECT Concept Report-Muckalee Creek Wetland and Stream Restoration Project

Attached please find the original copy of the concept report for the subject stream restoration project for your further handling for approval in accordance with the Plan Development Process(PDP).

Thank you for your attention to this issue. Please contact Mr. Steve Wiedl at (404)699-4420 if there are questions.

HDK/SCW

Attachment

cc: David Mulling
Gerald Ross
Jamie Simpson
Phillip Allen
Thomas Howell/District 3
Joe Palladi

Office of Environment & Location

### PROJECT CONCEPT REPORT

Project Number: CSSTP-M0006-00(942) Project Name: Muckalee Creek Mitigation Project

> County: Sumter P. I. Number: 0006942

Federal Route Number: N/A State Route Number: N/A

DATE 4-22-05	Stry C. Wull Project Manager
DATE 04/22/05	Horvey D. Keeple BK Office Head, State Environmental/Location Engineer
The concept as presented herein and su Regional Transportation Improvement (STIP).	abmitted for approval is consistent with that which is included in the Program (RTP) and the State Transportation Improvement Program
DATE	State Transportation Planning Administrator
DATE	
DATE	State Transportation Financial Management Administrator
DATE	State Traffic Safety & Design Engineer
	District Engineer
DATE	Project Review Engineer
DATE	State Road and Airport Design Engineer
	Page 1

Recommendation for approval:

Project Concept Report page 2

Project Number: CSSTP-M0006-00(942)

P. I. Number: 0006942 County: Sumter

**Need and Purpose:** The purpose of this project is to provide compensatory wetland and stream mitigation necessary to obtain Corps of Engineers 404 permits for various GDOT roadway and Bridge projects.

Description of the proposed project: This environmental mitigation project would involve performing wetland and stream restoration at an approximately 400 acre tract, already purchased by GDOT, located in forested terrain along Muckalee Creek approximately 2 miles south of Americus and 1 mile east of U.S. 19. The environmental restoration actions planned for this site include reestablishment of natural wetland hydrology by backfilling an extensive system of ditches excavated by the previous landowner; reestablishing wetland vegetation by harvesting planted pines and replanting with native bottomland hardwood tree species; and performing stream restoration by removing an extensive streamside berm which has been placed along the bank of Muckalee Creek.

Is the project located in a Non-attainment area?Yes _X No. This project is not for transportation purposes so will have no effect on air quality.
PDP Classification: Major Minor X Federal Oversight: Full Oversight (), Exempt(X), State Funded(), or Other ()
Functional Classification: N/A
U. S. Route Number(s): N/A State Route Number(s): N/A
Traffic (AADT):  Current Year: (20XX) N/A Design Year: (20YY) N/A
Existing design features:  • Typical Section: N/A
<ul> <li>Posted speed N/A mph</li> <li>Maximum degree of curvature: N/A</li> </ul>
<ul> <li>Maximum grade: N/A % (List mainline, cross roads, and driveways)</li> </ul>
• Width of right of way: N/A ft.
<ul> <li>Major structures: N/A         Width, and sufficient rating).     </li> </ul>
<ul> <li>Major interchanges or intersections along the project: N/A</li> </ul>
<ul> <li>Existing length of roadway segment and the beginning mile logs for each county segment. N/A</li> </ul>

Project Concept Report page 3

Project Number: CSSTP-M0006-00(942)

P. I. Number: 0006942 County: Sumter

Proposed Design Fe	eatures:
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•	Proposed typical section(s): N/A
	Proposed Design Speed Mainline <u>N/A</u> mph
	Proposed Maximum grade Mainline N/A % Maximum grade allowable N/A %.
•	Proposed Maximum grade Side Street N/A Maximum grade allowable N/A
	%.
•	Proposed Maximum grade driveway N/A%
•	Proposed Maximum degree of curve <u>N/A</u> . Maximum degree allowable <u>N/A</u>
•	Right of way
	o Width <u>N/A</u> .
	o Easements: Temporary (), Permanent (), Utility (X), Other ().
	o Type of access control: Full ( ), Partial ( ), By Permit ( ), Other (N/A ).
	O Number of parcels: 1 ,already purchased Number of displacements:
	O Business: N/A
	o Residences: N/A
	o Mobile homes: N/A
	$\circ$ Other: $N/A$
•	Structures:
	<ul> <li>No structures will be constructed.</li> </ul>
•	Major intersections and interchanges. Dirt access road ties in to U.S. 19
•	Traffic control during construction: N/A
	Design Exceptions to controlling criteria anticipated:

Continuing Circuita anticipatea.			
	UNDETERMINED	YES	NO
HORIZONTAL ALIGNMENT:	()	()	(N/A)
ROADWAY WIDTH:	()	()	(N/A)
SHOULDER WIDTH:	()	()	(N/A)
VERTICAL GRADES:	()	()	(N/A)
CROSS SLOPES:	()	()	(N/A)
STOPPING SIGHT DISTANCE:	()	()	(N/A)
SUPERELEVATION RATES:	()	()	(N/A)
HORIZONTAL CLEARANCE:	()	()	(N/A)
SPEED DESIGN:	()	()	(N/A)
VERTICAL CLEARANCE:	()	()	(N/A)
BRIDGE WIDTH:	()	()	( N/A)
BRIDGE STRUCTURAL CAPACIT	Y: ()	()	( N/A)

Design Variances; N/A.

Environmental concerns: Section 404 Permit (Nationwide 27 for mitigation sites) will be needed.
 Stream buffer variance obtained through Ga. EPD will be necessary for project. Mussel survey/possible Section 7 Coordination for Federally protected mussel(s) in Muckalee Creek. Avoidance of archaeological site will be necessary.

Project Concept Report page 4

Project Number: CSSTP-M0006-00(942)

P. I. Number: 0006942 County: Sumter

- Level of environmental analysis:
  - o Are Time Savings Procedures appropriate? Yes (X), No (),
  - o Categorical exclusion (X),
  - o Environmental Assessment/Finding of No Significant Impact (FONSI) ( ), or
  - o Environmental Impact Statement (EIS) ().
- Utility involvements: Dirt access road, which is GDOT ownership property, passes over an existing paved railroad crossing giving connection to the main mitigation construction portion of site. Crossing permit may need to be obtained/verified through GDOT State Railroad Utilities Liaison.

Project responsibilities:

- Design: Environmental Consultant (Biohabitats, Inc.) as administered by GDOT Office of Environment/Location
- o Right of Way Acquisition: Site has already been purchased fee simple by GDOT Right-of-Way
- Letting to contract: Office of Environment/Location coordinating through GDOT Contracts Administration
- Supervision of construction: District 3 Construction, with construction oversight support via mitigation design consultant Biohabitats, Inc. and mitigation task order consultants (Arcadis) oncall with GDOT Office of Environment/Location
- o Providing material pits: Either available on-site or supplied by contractor following review/approval through GDOT Office of Materials/Research.

#### Coordination

- · Initial Concept Meeting date and brief summary. N/A
- · Concept meeting date and brief summary. N/A
- P. A. R. meetings, dates and results. N/A.
- FEMA, USCG, and/or TVA. N/A.
- Public involvement. N/A.
- Local government comments. N/A.
- Other projects in the area. Upcoming U.S 19 widening
- Other coordination to date. N/A
- Railroads: Dirt access road, which is GDOT ownership property, passes over an existing paved railroad
  crossing giving connection to the main mitigation construction portion of site. Crossing permit may
  need to be obtained/verified through GDOT State Railroad Utilities Liaison.

### Scheduling - Responsible Parties' Estimate

- Time to complete the environmental process: 4 Months.
  Time to complete preliminary construction plans: Completed Feb, 2004.
- Time to complete right of way plans: \_\_\_N/A\_\_\_Months.
- Time to complete the Section 404 Permit: 3 Months.
- Time to complete final construction plans: <u>6</u> Months.
- Time to complete to purchase right of way: \_\_\_\_N/A\_\_\_Months.

Project Concept Report page 5 Project Number: CSSTP-M0006-00(942)

P. I. Number: 0006942 County: Sumter

Other alternates considered: N/A. GDOT Office of Environment/Location is continually seeking stream and/or wetland mitigation sites. Such mitigation opportunities occur on a case-by-case basis when there is a favorable convergence of factors such as: land parcel with obvious impairment of wetland/stream functions providing GDOT with cost effective restoration opportunity; willingness of landowner to negotiate sale of land at acceptable appraisal price; approval from regulatory agencies that site conditions and GDOT restoration proposals yield proper environmental mitigation; etc. The Muckalee Creek Mitigation Site in question is a very worthwhile mitigation tract from this perspective.

Comments: This site has been field reviewed by resource agencies and has been favorably received. GDOT Office of Environment/Location is currently negotiating a wetland banking instrument for this site which will allow for the release of needed stream and wetland mitigation credits. Construction of this site is of course integral to fulfilling wetland mitigation obligations and generation of needed mitigation credits.

#### **Attachments:**

- 1. Cost Estimate
- 2. Sketch location map

Attachment 1. Cost Estimate for Muckalee Creek Mitigation Site

Attachm	nent 1. Cost Estimate for Muckalee Creek Mitigation Site				
Item		the back to a few		UNIT	TOTAL
No.	ITEM DESCRIPTION	QUANTITY	UNIT	COST	COST
149	Construction Stakeout	1	LS	\$40,000.00	\$40,000
151	Mobilization	1	LS	\$120,000.00	\$120,000
163	Construction Exit	1	EA	\$1,500.00	\$1,500
201	Clearing & grubbing (incl. Tree removal)	69.0	AC	\$4,000.00	\$276,000
201	Partial Clearing	151.0	AC	\$2,000.00	\$302,000
210	Pump Around - Maintenance of Stream Flow	1	LS	\$30,000.00	\$30,000
210	Earthwork				
210	Installation of Ditch Plugs	2,928	CY	\$20.00	\$58,560
210	Drainage Ditch Backfilling and Grading	58,106	CY	\$7.00	\$406,739
210	On-Site Borrow	18,905	CY	\$10.00	\$189,050
	Planting - Zone 1: Riparian-Seasonally Flooded				A
702	Planting Zone 1 - Trees	19,401	EA	\$4.00	\$77,604
702	Planting Zone 1 - Shrubs	4,850	EA	\$2.50	\$12,125
700	Planting Zone 1 - Native Seed Mix	740,708	SF	\$0.05	\$37,035
	Planting - Zone 2 : Deep Swamp				
702	Planting Zone 2 - Trees	969	EA	\$4.00	\$3,876
702	Planting Zone 2 - Shrubs	350	EA	\$2.50	\$875
	Planting - Zone 3: Middle Hardwood Wetlands-Tempoprarily Inundation				
702	Planting Zone 3 - Trees	45,780	EA	\$4.00	\$183,120
702	Planting Zone 3 - Shrubs	11,446	EA	\$2.50	\$28,615
700	Planting Zone 3 - Native Seed Mix	1,232,748	SF	\$0.05	\$61,637
· · ·	Planting - Zone 4 : Higher Hardwood Wetlands-Seasonally Inundated				
702	Planting Zone 4 - Trees	26,446	EA	\$4.00	\$105,784
702	Planting Zone 4 - Shrubs	6,615	EA	\$2.50	\$16,537
700	Planting Zone 4 - Native Seed Mix	670,824	SF	\$0.08	\$53,665
700	Planting - Zone 5 : Seeding	261,360	SF	\$0.05	\$13,068
702	90% Plant Warrenty	1	LS	\$85,700.00	\$85,700
	SUBTOTAL				\$2,103,493
	10% Contingency				\$210,349
	TOTAL			Marataly Silver	\$2,313,842

Office of Environment & Location

### PROJECT CONCEPT REPORT

Project Number: CSSTP-M0006-00(942)
Project Name: Muckalee Creek Mitigation Project

County: Sumter P. I. Number: 0006942

Federal Route Number: N/A State Route Number: N/A

Stupl P. Will

1 1	Project Manager /
DATE 04/22/05	Harvey D. Keepler/SBK
	Office Head, State Environmental/Location Engineer
	bmitted for approval is consistent with that which is included in the Program (RTP) and the State Transportation Improvement Program
DATE	State Transportation Planning Administrator
DATE <b>5.6.0</b> 5	State Transportation Financial Management Administrator
DATE	State Traffic Safety & Design Engineer
DATE	District Engineer  Project Review Engineer
DATE	State Road and Airport Design Engineer

Page 1

Recommendation for approval:

DATE 4-22-05

Office of Environment & Location

### PROJECT CONCEPT REPORT

Project Number: CSSTP-M0006-00(942)
Project Name: Muckalee Creek Mitigation Project

County: Sumter P. I. Number: 0006942

Federal Route Number: N/A State Route Number: N/A

DATE 4-22-05	Shop C. Winds	
DATE 04/22/05	Project Manager  Howey D. Keeple BK  Office Head, State Environmental/Location Engineer	
에 있는 1000 HT :	omitted for approval is consistent with that which is included a regram (RTP) and the State Transportation Improvement	
DATE	Contraction Dispuis Administrator	
DATE	State Transportation Planning Administrator	
DATE	State Transportation Financial Management Administrator	
DATE 4/29/05	State Traffic Safety & Design Engineer	
DATE	Oistrict Engineer	
DATE	Project Review Engineer	
	State Road and Airport Design Engineer	
	우리아 전문 프로그램 그 아내는 아이들이 되었다. 이 전에 전문 교육을 받는 것은 사람들이 되었다. 그 사람들이 되었다.	

Recommendation for approval:

Office of Environment & Location



### PROJECT CONCEPT REPORT

Project Number: CSSTP-M0006-00(942)
Project Name: Muckalee Creek Mitigation Project

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DATE 0422/05	Office Head, State Environmental Location Engineer
	bmitted for approval is consistent with that which is included in the Program (RTP) and the State Transportation Improvement Program
DATE	State Transportation Diamain a Administrator
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DATE	State Transportation Financial Management Administrator
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DATE	
DATE 5-18-05	District Engineer Summers Den
DATE	Project Review Engineer
DATE	State Road and Airport Design Engineer

Page 1

Recommendation for approval: